CATALOG DOCUMENTATION
EMAP SURFACE WATERS PROGRAM LEVEL DATABASE
1997-1998 Mid-Atlantic Integrated Assessment Program
Stream Fish Count

TABLE OF CONTENTS

1. DATA SET IDENTIFICATION

1.1 Title of Catalog Document
1997-1998 Mid-Atlantic Integrated Assessment Program
Stream Fish Count

1.2 Authors of the Catalog Entry
U.S. EPA NHEERL Western Ecology Division
Corvallis, OR

1.3 Catalog Revision Date
December 2000

1.4 Data Set Name
FISHCNT

1.5 Task Group
Surface Waters

1.6 Data Set Identification Code
134

1.7 Version
002

1.8 Requested Acknowledgement
These data were produced as part of the U.S. EPA's Environmental Monitoring and Assessment Program (EMAP). If you publish these data or use them for analyses in publication, EPA requires a standard statement for work it has supported:

"Although the data described in this article have been funded wholly or in part by the U.S. Environmental Protection Agency through its EMAP Surface Waters Program, it has not been subjected to Agency review, and therefore does not necessarily reflect the views of the Agency and no official endorsement of the conclusions should be inferred."

2. INVESTIGATOR INFORMATION

2.1 Principal Investigator

Dr. John Stoddard
U.S. Environmental Protection Agency
NHEERL Western Ecology Division
200 S.W. 35th Street
Corvallis, OR 97333

2.2 Investigation Participants - Sample Collection

Oregon State University
State of West Virginia
State of Maryland
University of Maryland
U.S. Environmental Protection Agency
- Office of Research and Development
- Region III

3. DATA SET ABSTRACT

3.1 Abstract of the Data Set

This data set contains a list of species and counts of numbers of individuals of each species collected at each stream sampled.

3.2 Keywords for the Data Set

Fish assemblage, fish community, fish species identification

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

In 1997 and 1998 the Ecological Monitoring and Assessment Program (EMAP) Surface Waters Program became a collaborator in the Mid-Atlantic Integrated Assessment (MAIA) project, which is attempting to produce an assessment of the condition of surface water and estuarine resources. The MAIA project represents a follow-up to the MAHA study, with an expanded geographic scope (southern New York to northern North Carolina, with more sites located in the Piedmont and Coastal Plain regions) and a different index period (July-September).

4.2 Data Set Objective

This data set is part of a demonstration project to evaluate approaches to monitoring streams in EMAP. The data set contains the results of multi-habitat sample of the fish assemblage taken during the sample period.

4.3 Data Set Background Discussion
The primary function of the stream fish data are to provide a snapshot of the fish assemblage present in the stream at the time of sampling. The fish community represents an integral component of stream biological integrity and represents a snapshot of a publically visible reflection of stream quality. The fish community within a stream is an integral component of stream biological integrity and represents a publicly visible reflection of stream quality.

4.4 Summary of Data Set Parameters
Fish Assemblage parameters include abbreviated genus/species fish code and abundance collected or counted.

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition

5.1.1 Sampling Objective
To obtain a sample of the fish assemblage within a stream during the sample period.

5.1.2 Sample Collection Methods Summary
The assemblage was sampled using single pass with a backpack electrofishing unit distributed in multiple habitats throughout the stream.

5.1.3 Sampling Start Date
May 1997

5.1.4 Sampling End Date
September 1998

5.1.5 Platform
NA

5.1.6 Sampling Gear
Backpack electrofishing unit

5.1.7 Manufacturer of Instruments
NA

5.1.8 Key Variables
NA

5.1.9 Sampling Method Calibration
NA

5.1.10 Sample Collection Quality Control
See Lazorchak, et al. 1998.

5.1.11 Sample Collection Method Reference

Chaloud, D.J. and D.V. Peck. 1994. Environmental Monitoring and Assessment Program: Integrated Quality Assurance Project Plan for the Surface Waters Resource Group, 1994 Activities. EPA 600/X-91/080, Rev. 2.00 U.S. Environmental Protection Agency, Las Vegas, Nevada.

Lazorchak, J.M., Klemm, D.J., and Peck D.V. (editors). 1998. Environmental Monitoring and Assessment Program- Surface Waters: Field Operations and Methods for Measuring the Ecological Condition of Wadeable Streams. EPA/620/R-94/004F. U.S. Environmental Protection Agency, Washington, D.C.

5.1.12 Sample Collection Method Deviations
NA

5.2 Data Preparation and Sample Design

5.2.1 Sample Processing Objective
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.2 Sample Processing Methods Summary
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.3 Sample Processing Method Calibration
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.4 Sample Processing Quality Control
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

5.2.5 Sample Processing Method Reference
See Lazorchak, et al. (1998) and Chaloud and Peck (1994).

6. DATA MANIPULATIONS

6.1 Name of New or Modified Values
None

6.2 Data Manipulation Description
See Chaloud and Peck (1994).

7. DATA DESCRIPTION

7.1 Description of Parameters

Parameter SAS Name	Data Type	Len	Format	Parameter Label
ABUND	Num	8	BEST	Total number of specimens
ANOM_CNT	Char	6		Anomalies Count
ANOM_COD	Char	8	$CHAR	Anomalies Code
DATE_COL	Num	8	MMDDYY	Date of site visit
FAMILY	Char	20	$	Family name
GENUS	Char	21	$CHAR	Genus
LAT_DD	Num	8		X-Site Latitude (decimal degrees)
LENG_MAX	Num	8		Maximum fish length
LENG_MIN	Num	8		Minimum fish length
LON_DD	Num	8		X-Site Longitude (decimal degrees)
MORT_CNT	Num	8		Number of mortalities
PCT_SAMP	Num	8		Percent of transpaces sampled
SAMPLED	Char	30	$CHAR	Site sampled code
SPECIES	Char	22	$CHAR	Species
STRM_ID	Char	10	$CHAR	Stream ID
TRANSECT	Char	9	$CHAR	Transpaces sampled
VERTCODE	Char	8		Unique species ID
VERTNAME	Char	45	$CHAR	Vertebrate common name
VISIT_NO	Num	8	BEST	Visit number
VOUCHERS	Num	8	BEST	Number of fish vouchered
YEAR	Num	8		Year of site visit

7.1.6 Precision to which values are reported

7.1.7 Minimum Value in Data Set

Name	Min
ABUND	1
DATE_COL	05/20/1997
LAT_DD	35.182938
LENG_MAX	5
LENG_MIN	2
LON_DD	-83.555659
MORT_CNT	0
PCT_SAMP	20
VISIT_NO	0
VOUCHERS	0
YEAR	1997

7.1.7 Maximum Value in Data Set

Name	Max
ABUND	2357
DATE_COL	09/30/1998
LAT_DD	42.600349
LENG_MAX	994
LENG_MIN	910
LON_DD	-74.662034
MORT_CNT	298
PCT_SAMP	100
VISIT_NO	3
VOUCHERS	216
YEAR	1998

7.2.1 Column Names for Example Records

"ABUND","ANOM_CNT","ANOM_COD","DATE_COL","FAMILY","GENUS","LAT_DD","LENG_MAX",
"LENG_MIN","LON_DD","MORT_CNT","PCT_SAMP","SAMPLED","SPECIES","STRM_ID",
"TRANSECT","VERTCODE","VERTNAME","VISIT_NO","VOUCHERS","YEAR"

7.2.2 Example Data Records

1," "," ",09/08/1997,"CYPRINIDAE","RHINICHTHYS",38.247943,80,80,81.886602,0,
100,"Yes","ATRATULUS","MAIA97-001","ALL","RHINATRA","BLACKNOSE DACE",1,1,1997

39," ","
",09/08/1997,"CYPRINIDAE","SEMOTILUS",38.247943,113,34,81.886602,0,100,"Yes",
"ATROMACULATUS","MAIA97-001","ALL","SEMOATRO","CREEK CHUB",1,25,1997

.," "," ",07/12/1997," "," ",38.550017,.,.,82.144807,.,.,"Not fished",.," ",
"MAIA97-002"," "," "," ",1,.,1997

10," "," ",07/21/1997,"CYPRINIDAE","RHINICHTHYS",38.550017,50,40,82.144807,0,
100,"Yes","ATRATULUS","MAIA97-002","ALL","RHINATRA","BLACKNOSE DACE",2,8,1997

2,"2","BS",07/21/1997,"PERCIDAE","PERCINA",38.550017,78,44,82.144807,0,100,
"Yes","MACULATA","MAIA97-002","ALL","PERCMACU","BLACKSIDE DARTER",2,.,1997

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude
-83 Degrees 33 Minutes 20 Seconds West (-83.555659 Decimal Degrees)

8.2 Maximum Longitude
-74 Degrees 39 Minutes 43 Seconds West (-74.662034 Decimal Degrees)

8.3 Minimum Latitude
35 Degrees 10 Minutes 58 Seconds North (35.182938 Decimal Degrees)

8.4 Maximum Latitude
42 Degrees 36 Minutes 1 Seconds North (42.600349 Decimal Degrees)

8.5 Name of Area or Region
Mid Atlantic: EPA Region III which includes Delaware, Maryland, New York, Virginia, and West Virginia

9. QUALITY CONTROL / QUALITY ASSURANCE

9.1 Data Quality Objectives
See Chaloud and Peck (1994).

9.2 Quality Assurance Procedures
See Chaloud and Peck (1994).

9.3 Unassessed Errors
NA

10. DATA ACCESS

10.1 Data Access Procedures

10.2 Data Access Restrictions

10.3 Data Access Contact Persons

10.4 Data Set Format

10.5 Information Concerning Anonymous FTP

10.6 Information Concerning WWW

10.7 EMAP CD-ROM Containing the Data

11. References

Chaloud, D.J. and D.V. Peck. 1994. Environmental Monitoring and Assessment Program: Integrated Quality Assurance Project Plan for the Surface Waters Resource Group, 1994 Activities. EPA 600/X-91/080, Rev. 2.00 U.S. Environmental Protection Agency, Las Vegas, Nevada.

Lazorchak, J.M., Klemm, D.J., and Peck D.V. (editors). 1998. Environmental Monitoring and Assessment Program- Surface Waters: Field Operations and Methods for Measuring the Ecological Condition of Wadeable Streams. EPA/620/R-94/004F. U.S. Environmental Protection Agency, Washington, D.C.

12. TABLE OF ACRONYMS

13. PERSONNEL INFORMATION

Project Manager
Dr. John Stoddard
U.S. Environmental Protection Agency
NHEERL Western Ecology Division
200 S.W. 35th Street
Corvallis, OR 97333
541-754-4441
541-754-4716(FAX)
stoddard.john@epa.gov

Quality Assurance Officer
Dave Peck
U.S. Environmental Protection Agency
NHEERL Western Ecology Division
200 S.W. 35th Street
Corvallis, OR 97333
541-754-4426
541-754-4716(FAX)
peck.david@epa.gov

Information Management, EMAP-Surface Waters
Marlys Cappaert
OAO c/o U.S. Environmental Protection Agency
NHEERL Western Ecology Division
200 S.W. 35th Street
Corvallis, OR 97333
541-754-4467
541-754-4716(FAX)
cappaert.marlys@epa.gov